

Work Order ID 154426

Tuesday, December 13, 2016 7:59:33 AM

154426

Page 1

Item ID: D4002-7

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Fuel Supply Hose

Start Date: 12/13/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 12/28/2016 Req'd Qty: 4.00

4

Customer:

Reference:

DAS
13

Approvals:

Process Plan:

9-59

Date:

DEC 13 2016

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4002

D

DAS
13
9-59

100

0.00

100

Purchasing

Memo

0.00

Issue P/O: 34615
Purchase part as per Dwg D4002
Part #:156005-6D-0213
Possible Supplier: Aviall / API
Material release note required4 DEC 13 2016

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.01

Packaging

4x 5016-12-16

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
		OTHER : ☐							

154426

Page 2

N900040100

Setup Start *NS1*

Stop ***NS2***

Cust Item ID:

Start Date: 12/13/2016 **Start Qty:** 4.00

4

Customer:

Required Date: 12/28/2016 **Req'd Qty:** 4.00

4

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

**Insp.
Stamp**

0.00

120

0.00

QC

Quality Control

Memo

DAS
9
9-89

0.00

125

0.06

Small Fab

Small Fab

Memo

INSTALL DART LOGO AND HEAT SHRINK AS PER DWG

↳ B112922

4 FF DEC 20 2016

QC5- Inspect part completeness to step on W/O

0.00

127

0.01

QC

Quality Control

Memo

DAS
9
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
2A7 e 28-6								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

Work Order ID 154426

Tuesday, December 13, 2016 7:59:33 AM

154426

Page 3

Item ID: D4002-7

Accept

N900040100

Setup Start

NS1

Revision ID:

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NS2

Item Name: Fuel Supply Hose

Start Date: 12/13/2016 Start Qty: 4.00

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Cust Item ID:

Required Date: 12/28/2016 Req'd Qty: 4.00

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Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location

ST2

0.00

130

Packaging

Memo

0.01

Packaging

4

DEC 21 2016

DAS
6
9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.07

Quality Control

DAS
21
9-89

DEC 21 2016

DAS
21
9-89

DEC 21 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Tuesday, December 13, 2016 7:59:33 AM

Page 1

Required Qty: 4.00

[illegible]

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

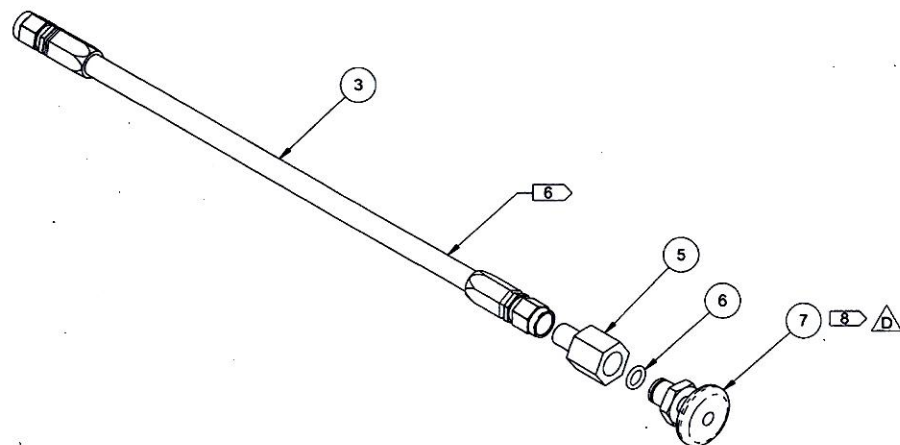


QA Closed: _____ Date: _____

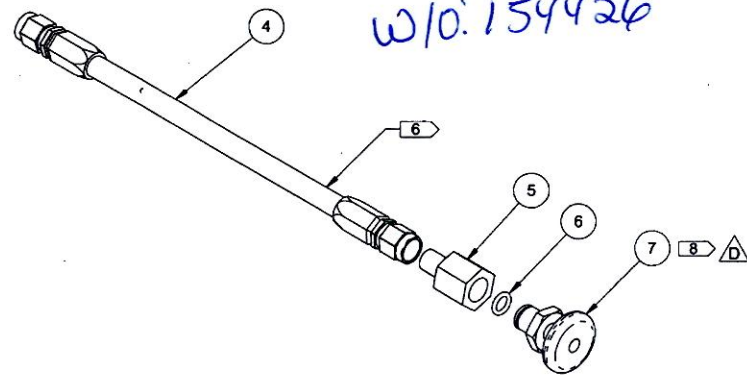
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
☐ OTHER : _____					

ITEM NO.	QTY. -041	QTY. -043	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X		D4002-041	AUX TANK DRAIN HOSE ASSEMBLY, FWD	JCA-M47-1-13
2		X	D4002-043	AUX TANK DRAIN HOSE ASSEMBLY, AFT	JCA-M47-1-16
3	1		D4002-1	HOSE ASSEMBLY	
4		1	D4002-3	HOSE ASSEMBLY	
5	1	1	AN894D4-3	FITTING	
6	1	1	MS29512-04	O RING	
7	1	1	CCB4320	FUEL DRAIN VALVE (MS29528-4)	



D4002-041 DRAIN HOSE - FRONT



D4002-043 DRAIN HOSE - REAR

RELEASED
2011-11-16
JW

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK
- 7) WEIGHT: D4002-041 - 0.21 lbs
D4002-043 - 0.20 lbs
- 8) DRAIN VALVE MAY NOT APPEAR EXACTLY AS PICTURED

DESIGN	ADDED NOTE 8	DC	11.10.06
DRAWN	ADDED 8.00" TO D4002-1/3 HOSES; AFFECTED WEIGHT	MB	11.09.14
CHECKED	CHANGE LENGTH MEASUREMENT FOR -3, ZN C2-2	HS	10.11.03
MFG. APPR.	NEW ISSUE	HS	10.03.01
APPROVED	REV.	BY	DATE
DE APPR.	DESCRIPTION		
DATE	11.10.06		

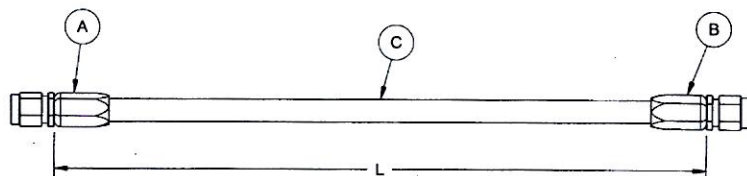
DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4002** REV. D
SHEET 1 OF 2
TITLE **HOSE ASSEMBLY** SCALE NTS

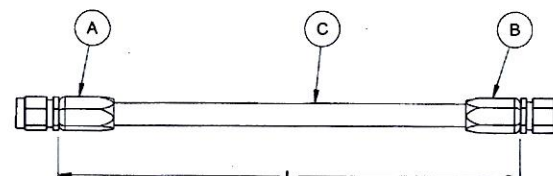
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WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART AEROSPACE PART NUMBER	JOHN CAMERON AVIATION PART NUMBER
D4002-1	REF JCA-M47-1-13
D4002-3	REF JCA-M47-1-16
D4002-5	JCA-M47-2-13
D4002-7	JCA-M47-2-25

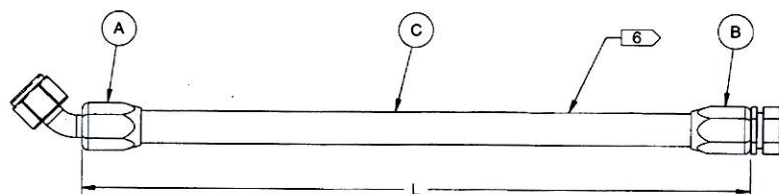
SPECIFICATION CONTROL DRAWING



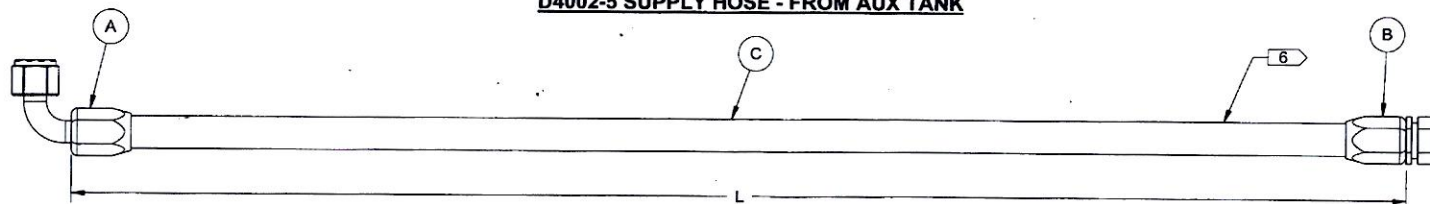
D4002-1 HOSE ASSEMBLY



D4002-3 HOSE ASSEMBLY



D4002-5 SUPPLY HOSE - FROM AUX TANK



D4002-7 SUPPLY HOSE - PUMP TO MAIN TANK FILLER NECK

DART PART NUMBER	STRATOFLEX PART NUMBER	POSSIBLE VENDOR	LENGTH "L"	END FITTING "A"	END FITTING "B"	HOSE "C"	WEIGHT
D4002-1	156001-3S-0185	AVIALL/API	17.90	676-3S	676-3S	156-3	0.16 lbs
D4002-3	156001-3S-0154	AVIALL/API	14.76	676-3S	676-3S	156-3	0.15 lbs
D4002-5	156003-6D-0102	AVIALL/API	8.94	678-6D	676-6D	156-6	0.13 lbs
D4002-7	156005-6D-0213	AVIALL/API	20.31	680-6D	676-6D	156-6	0.19 lbs

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK
- 7) WEIGHT: SEE TABLE

RELEASED
2011-11-16

DESIGN	<i>JS</i>	DART AEROSPACE LTD	
DRAWN	<i>BC</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JS</i>	DRAWING NO. D4002	REV. D
MFG. APPR.	<i>JS</i>		SHEET 2 OF 2
APPROVED	<i>JS</i>	TITLE	SCALE
DE APPR.	<i>JS</i>	HOSE ASSEMBLY	NTS
DATE	11.10.06	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO34615

Purchase Order Date 12/13/2016

PO Print Date 12/13/2016

Page Number 1 of 8

Order From :

AVIALL
PO BOX 842275

DALLAS, TX 75284-2275
USA

VU-AVI003

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

DEC 13 2016

Contact Name

Vendor Phone 905-676-1695

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

EXW - (Ex Works)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						
1	156005-6D0213	Hose Assembly	12/16/2016 Yes 12/16/2016		4.00 Each	\$227.29	\$909.16
	AS PER DWG D4002 REV. D B154426						
						Line Total:	\$909.16
2	156003-6D0102	Hose Assembly	12/16/2016 Yes 12/16/2016		4.00 Each	\$178.08	\$712.32
	AS PER DWG D4002 REV. D B154425						
						Line Total:	\$712.32

PO Instructions: Fedex Acc#151793240

Note:

12/13/2016



Hose Shop 2755 Regent Blvd. DFW Airport 75261
Phone 972-586-1380 Fax 972-586-1381 www.aviall.com

TSO CERTIFICATION

It is hereby certified that (A) The parts and/or materials reflected herein were produced under Federal Aviation Administration approved manufacturing and quality control system/methods as set forth in the FAA issued technical standard order authorizations (TSOA) issued to Stratoflex and (B) such part and/or materials are new and are in condition for safe operation.

Aviall Order Number: 1002703745

Part Numbers:

1. 156005-6D0213 4EA.

2. 156003-6D0102 4EA.

DAS

9

9-89

16-12-19

Signed: 

Date: 12-14-16

"Aviall is not providing OEM parts. Aviall is an authorized Stratoflex distributor providing TSO assemblies. Numbers referenced per customer requirements are for customer reference ONLY and are in no way intended to be represented as OEM parts. Any reference to an OEM part number does not authorize or reflect installation authority for this part. The installation authority is provided by the mechanic installing this product in accordance with FAR Part 43".

If applicable, satisfactory compliance with the conditions and tests required for TSO approval indicates the hose assembly has met the minimum performance standards as stated in the TSO. Furthermore, it is the responsibility of the installer to determine the installation eligibility and that it will not cause the hose assembly to be subjected to conditions in excess of those for which it has been approved.

FORM# CERT -001